

CLAIMS

1. Method for access control in a multicast system when distributing data from a source (VS) on a common link (L3) to at least two users (U1-U12) via a node (BN21),
5 characterized by the following steps:

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- assigning a weight to each user (U1-U12) associated with the node (BN21), which weights determine each user's allowed bandwidth i.e. bandwidth allowed to use out of available bandwidth on the common link (L3);
- receiving to the node (BN21), a request to join a multicast session (S_{g_1}), from a user (U1);
- comparing in the node (BN21), actual bandwidth usage by the user (U1) calculated as the sum of the user's bandwidth part of each used session on the common link (L3) including the new request, with the users (U1) allowed bandwidth.

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2. Method for access control in a multicast system according to claim 1, comprising the following further step:

- deny the request if the allowed bandwidth is lower than the actual bandwidth.

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3. Method for access control in a multicast system according to claim 1, comprising the following further steps:

- 5 - finding out that the requested session (S_{81}) is used by at least one other user (U8,U12);
 - allowing the request from U1.

10 4. Method for access control in a multicast system according to claim 1, comprising the following further steps:

- 15 - perceiving that the user (U1) used the session (S_{81}) less than a predefined qualification time ago;
 - changing temporarily the user's weight;
 - allowing the request if the allowed bandwidth is higher than the actual bandwidth.

20 5. Method for access control in a multicast system according to claim 4, comprising before changing the user's weight, the following further step:

- perceiving that the user used the session (S_{81}) during a time period that exceeds a predetermined guarantee time.

6. Method for access control in a multicast system according to claim 4 or 5, comprising the following further steps:

- the user (U1) leaves the requested session S_{81} ;
- 5 - changing back the user's weight to it's original value.

10 7. Arrangement for access control in a multicast system when distributing data from a source (VS) on a common link (L3) to at least two users (U1-U12) via a node (BN21), which arrangement is characterized by:

- means for assigning a weight to each user (U1-U12) associated with the node (BN21), which weights determine each user's allowed bandwidth i.e. bandwidth allowed to use out of available bandwidth on the common link (L3);
- 15 - means in the node (BN21) for receiving a request to join a multicast session (S_{81}), from a user (U1);
- means for comparing in the node (BN21), actual bandwidth usage by the user (U1) calculated as the sum of the user's bandwidth part of each used session on the common link (L3) including the new request, with the users (U1) allowed bandwidth.

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8. Arrangement for access control in a multicast system according to claim 7, comprising means for denying the request if the allowed bandwidth is lower than the actual bandwidth.

9. Arrangement for access control in a multicast system according to claim 7, comprising:

- means for finding out that the requested session (S_{81}) is used by at least one other user (U8,U12);
- means for allowing the request from U1.

10. Arrangement for access control in a multicast system according to claim 7, comprising:

- 10 - means for perceiving that the user (U1) used the session (S_{81}) less than a predefined qualification time ago;
- means for changing temporarily the user's weight;
- means for allowing the request if the allowed bandwidth is higher than the actual bandwidth.

11. Arrangement for access control in a multicast system according to claim 10, comprising:

- 20 - means for perceiving that the user used the session (S_{81}) during a time period that exceeds a predetermined guarantee time.

25 12. Arrangement for access control in a multicast system according to claim 10 or 11, comprising means for

changing back the user's weight to it's original value.

- 5 13. Arrangement for access control in a multicast system according to any of the claims 7-12 comprising means for calculating the user's (U1) actual bandwidth.
- 10 14. Arrangement for access control in a multicast system according to any of the claims 7-13 comprising means for calculating the user's (U1) allowed bandwidth.